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Docket No.: 21581-00312-US

Application No. 10/743,474
Amendment dated
Reply to Office Action of June 13, 2006

REMARKS

Claims 1-12 are now pending in the present application. Claim 1 has been amended to recite that the "chemical conversion coating agent does not substantially contain phosphate ions". Support for this amendment can be found on page 14, lines 14-15 of the specification. The amendments to the claims do not introduce any new matter. Claims 1-3 and 6 are drawn to the elected invention identified by the examiner as group I. Claims 4, 5 and 7-12 are directed to non-elected invention and may be canceled by the examiner upon the allowance of the claims directed to the elected invention.

Claims 1 and 3 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,976,272 to Seidel et al. in view of U.S. Patent 5,441,580 to Tomlinson. The cited references do not render obvious claims 1 and 3 as amended. The present invention of amended claim 1 is a chemical conversion coating agent that does not substantially contain phosphate ions.

Treating agents based on zinc phosphate are widely used in chemical conversion treatments. However, these are economically disadvantageous and low in workability in a wastewater treatment. Further, there is a problem of formation and precipitation of salts, being insoluble in water, associated with the metal surface treatment using treating agents based on zinc phosphate. Such a precipitated substance is generally referred to as sludge and increases in cost for removal and disposal of such sludge is a troublesome problem. In addition, since phosphate ions have a possibility of placing a burden on the environment due to eutrophication, it takes efforts for treating wastewater. Because of the above-mentioned problems, phosphate ions are preferably not used in the chemical conversion coating agent. But, phosphate ions were required in the chemical conversion coating agent for forming a good chemical conversion coat.

However, the chemical conversion coating agent of the present invention does not substantially contain phosphate ions. Therefore, above-mentioned problems that are caused by using phosphate ions in the treating agents do not occur in the present invention. Although the agent of the present invention does not substantially contain phosphate ions, it is possible to apply good chemical conversion treatment to such diverse metals as iron, zinc and aluminum.

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Therefore, the present invention has an extremely high technical significance.

This fact is proved with examples in the present specification. Agents of the present invention not containing phosphate ions are used in Examples 1-28 (Table 1-2). On the other hand, zinc phosphate based agents are used in Comparative Examples 1-4 (Table 3). Results of Examples 1-28 and Comparative Examples 1-4 on evaluation tests are shown in Table 4. In table 4, the results of secondary adhesion test (SDT) on Examples 1-28 are equivalent to those of Comparative Examples 1-4. So, it is shown that the agents of the present invention can form good chemical conversion coats, which are equivalent to conversion coats by zinc phosphate based agents treatment. Also, in Table 4, it is shown that sludge is not formed in Examples 1-4, while is formed in Comparative Examples 1-4.

Seidel fails to render obvious the present invention since, among other things, the agent of Seidel requires phosphate ions as an essential component (see claim 1). On the other hand, the present invention does not substantially contain phosphate ions for solving above problems as discussed above.

Also, the agent of Seidel is a treating agent based on zinc phosphate, while the present invention is an agent based on zirconium, titanium or hafnium, and fluorine. The former agent is completely different from the latter one in the point of components and mechanism of conversion coat formation. Accordingly, the above difference is extremely significant.

Tomlinson fails to overcome the above discussed deficiencies of Seidel with respect to rendering unpatentable the present invention. The composition of Tomlinson is an agent based on zirconium and fluorine (claim 6, example). As above-mentioned, the agent based on zinc phosphate (the agent of Seidel) is different from the agent based on zirconium and fluorine (the composition of Tomlinson).

Also, the agent of Tomlinson is an aqueous composition for coating aluminum finstock, not a treating agent for forming a chemical conversion coat (claim 1). Namely, the treating agent of Seidel is completely different from the composition of Tomlinson in the point of use.

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Claims 2 and 6 were rejected under 35 U.S.C. 103(a) as being unpatentable over Seidel in view of Tomlinson and further in view of U.S. Patent Application Publication 2002/0007872 to Cuyler. Cuyler fails to overcome the above discussed deficiencies of Seidel and Tomlinson with respect to rendering unpatentable the present invention. Furthermore, Cuyler does not even remotely suggest that the phosphate ions, essential components of Seidel could be omitted from the compositions and still maintain the good chemical conversion characteristics. In fact, the agent of Cuyler requires phosphate ions as an essential component, and is an agent based on zinc phosphate (claim 1). Therefore, the descriptions of Seidel, Tomlinson and Cuyler are not suggestive of achieving the present invention.

The mere fact that cited art may be modified in the manner suggested in the Office Action does not make this modification obvious, unless the cited art suggest the desirability of the modification. No such suggestion appears in the cited art in this matter. The Examiner's attention is kindly directed to *In re Lee* 61 USPQ2d 1430 (Fed. Cir. 2002) *In re Dembiczak et al.* 50 USPQ2d. 1614 (Fed. Cir. 1999), *In re Gordon*, 221 USPQ 1125 (Fed. Cir. 1984), *In re Laskowski*, 10 USPQ2d. 1397 (Fed. Cir. 1989) and *In re Fritch*, 23, USPQ2d. 1780 (Fed. Cir. 1992).

In *Dembiczak et al.*, supra, the Court at 1617 stated: "Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. See, e.g., *C.R. Bard, Inc., v. M3 Sys., Inc.*, 157 F.3d. 1340, 1352, 48 USPQ2d. 1225, 1232 (Fed. Cir. 1998) (describing 'teaching or suggestion motivation [to combine]' as in 'essential evidentiary component of an obviousness holding'), *In re Rouffet*, 149 F. 3d 1350, 1359, 47 USPQ2d. 1453, 1459 (Fed. Cir. 1988) ('the Board must identify specifically... the reason one of ordinary skill in the art would have been motivated to select the references and combining them');..."

Also, the cited art lacks the necessary direction or incentive to those or ordinary skill in the art to render a rejection under 35 U.S.C. 103 sustainable. The cited art fails to provide the degree of predictability of success of achieving the properties attainable by the present invention

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needed to sustain a rejection under 35 U.S.C. 103. See *Diversitech Corp. v. Century Steps, Inc.*, 7 USPQ2d 1315 (Fed. Cir. 1988), *In re Mercier*, 185 USPQ 774 (CCPA 1975) and *In re Naylor*, 152 USPQ 106 (CCPA 1966).

Moreover, the properties or results of the subject matter and improvements which are disclosed in the specification are to be considered when evaluating the question of obviousness under 35 U.S.C. 103. See *Gillette Co. v. S.C. Johnson & Son, Inc.*, 16 USPQ2d. 1923 (Fed. Cir. 1990), *In re Antonie*, 195, USPQ 6 (CCPA 1977), *In re Estes*, 164 USPQ (CCPA 1970), and *In re Papesch*, 137 USPQ 43 (CCPA 1963).

No property can be ignored in determining patentability and comparing the claimed invention to the cited art. Along these lines, see *In re Papesch*, supra, *In re Burt et al*, 148 USPQ 548 (CCPA 1966), *In re Ward*, 141 USPQ 227 (CCPA 1964), and *In re Cescon*, 177 USPQ 264 (CCPA 1973).

The rejection of the claims is in the nature of "ought to be tried" which is an impermissible standard under 35 U.S.C. 103 (see *Jones v. Hardy*, 220 U.S.P.Q. 1021 [CAFC, 1984]).

Therefore, it is not obvious for one of ordinary skill in the art to achieve the present invention of amended claim 1 and claims dependent thereon on basis of Seidel, Tomlinson and Cuyler.

The provisional rejection of claims 1-3 and 6 under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1-6 of copending application 10/743,387 has been overcome by the filing of the attached Terminal Disclaimer. The filing of the Terminal Disclaimer is not to be construed as an admission, estoppel or acquiescence. See *Quad Environmental Technology v. Union Sanitary District*, 20 USPQ2d 1392 (Fed. Cir. 1991) and *Ortho Pharmaceuticals Corp. v. Smith*, 22 USPQ2d 1119 (Fed. Cir. 1992).

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Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 21581-00312-US from which the undersigned is authorized to draw.

Dated: 9-12-06

Respectfully submitted,

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